AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1-29. (Canceled)

30. (Currently Amended) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information ~~or bearer capability information~~, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

31-32. (Canceled)

33. (Currently Amended) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information ~~or bearer capability information~~, wherein the multi-level service information includes Multi-Level Precedence and Preemption (MLPP) precedence levels utilized in circuit-switched networks, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

34. (Currently Amended) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information ~~or bearer capability information~~, wherein the multi-level service information includes enhanced Multi-Level Precedence and Preemption (eMLPP) precedence levels utilized in GSM networks, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

35. (Previously Presented) The method according to claim 30, wherein the packet-switched service parameters define a requested level of service in the packet-switched network through bit settings in a service differentiation field (DS) of data packets, wherein the DS field is a Type of Service field according to IPv4.

36. (Previously Presented) The method according to claim 30, wherein the packet-switched service parameters define a requested level of service in the packet-switched network through bit settings in a service differentiation field (DS) of data packets, wherein the DS field is a Traffic Class Octet field according to IPv6.

37. (Currently Amended) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:

receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein the packet-switched service parameters define a level of precedence assigned to a data stream within the packet-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network;

mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence utilized for a call in the circuit-switched network corresponding to the level of precedence assigned to the data stream in the packet-switched network, wherein the circuit-switched service parameters define multi-level service information ~~or bearer capability information~~, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

forwarding payload data across a network boundary between the packet-switched network and the circuit-switched network using a mapping result;

wherein the payload data is transported in the circuit-switched network with a precedence level corresponding to the mapped precedence level from the packet-switched network.

38. (Previously Presented) The method according to claim 30, wherein packets in a data stream with a corresponding higher level of precedence are provided with Multiple Protocol Label Switching (MPLS) protocol labels utilized in packet headers to define a label-switched path for a data stream within the packet-switched network;

wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.

39. (Previously Presented) The method according to claim 37, wherein packets in a data stream with a higher level of precedence are provided with Multiple Protocol Label Switching (MPLS) protocol labels utilized in packet headers to define a label-switched path for a data stream within the packet-switched network;

wherein the payload data is transported in the circuit-switched network with a high precedence level when the payload data is transported in the packet-switched network utilizing a label-switched path.

40. (Previously Presented) The method according to claim 30, wherein a resource reservation protocol (RSVP) is utilized in the packet-switched network to reserve bandwidth for a high priority data stream mapped from a corresponding high precedence call in the circuit-switched network.

41. (Previously Presented) The method according to claim 37, wherein a resource reservation protocol (RSVP) is utilized to reserve bandwidth in the packet-switched network for a high priority data stream;

wherein the payload data is transported in the circuit-switched network with a high precedence level when the RSVP is utilized to reserve bandwidth in the packet-switched network for a high priority data stream.

42. (Currently Amended) An interworking node adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented

protocol and a packet-switched network using a packet-oriented protocol, said interworking node comprising:

means for receiving circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information ~~or bearer capability information~~, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

means for mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

means for forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

43. (Currently Amended) An interworking node adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said interworking node comprising:

means for receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein the packet-switched service parameters define a level of precedence assigned to a data stream within the packet-

switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network;

means for mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence utilized for a call in the circuit-switched network corresponding to the level of precedence assigned to the data stream in the packet-switched network, wherein the circuit-switched service parameters define multi-level service information ~~or bearer capability information~~, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

means for forwarding payload data across a network boundary between the packet-switched network and the circuit-switched network using a mapping result;

wherein the payload data is transported in the circuit-switched network with a precedence level corresponding to the mapped precedence level from the packet-switched network.